

CLAIMS

1. A method of producing a sheet of coated substrate, comprising:

providing a substrate;

5 providing a solution or dispersion of a first material that adheres to the substrate mixed with an amine terminated material;

coating the provided substrate with the solution; and

drying the substrate coated with the solution to form a solid coating thereon.

10 2. A method according to claim 1 wherein the amine terminated material is a diamine terminated material.

3. A method according to claim 1 wherein the amine terminated material is a monoamine terminated material.

15 4. A method according to claim 1 wherein the amine terminated material is a tri-amino terminated material.

5. A method according to claim 2 wherein the amine terminated material is diamine poly (propylene oxide).

6. A method according to claim 3 wherein the amine terminated material is mono-amino poly (propylene oxide).

25 7. A method according to claim 4 wherein the amine terminated material is tri-amino poly (propylene oxide).

8. A method according to any of the preceding claims wherein the first material comprises polyvinyl alcohol.

30 9. A method according to any of claims 1-7 wherein the first material comprises a styrene-butadiene copolymer.

10. A method according to any of claims 1-7 wherein the first material comprises an acrylic ester copolymer.

11. A method according to any of the preceding claims wherein the substrate comprises  
5 PET.

12. A method according to any of claims 1-10 wherein the substrate comprises polypropylene.

10 13. A method according to any of the preceding claims wherein the solution or dispersion also comprises sodium hydroxide.

14. A method according to any of the preceding claims wherein the dry weight of amine terminated material is between 5 and 30% of the dry weight of the coating.

15 15. A method according to claim 14 wherein the dry weight of amine terminated material is 10% or more of the dry weight of the coating.

20 16. A method according to claim 14 wherein the dry weight of amine terminated material is 15% or more of the dry weight of the coating.

17. A method according to any of claims 14-16 wherein the dry weight of amine terminated material is 25% or less of the dry weight of the coating.

25 18. A coated substrate produced according to the method of any of the preceding claims.

19. A printed sheet comprising:  
a coated sheet produced according to the method of any of claims 1-18; and  
an image printed on the sheet.

30 20. A printed sheet according to claim 19 wherein the image is printed using a liquid toner process.

21. A method of printing comprising:

providing a coated substrate according to claim 18 or produced according to any of claims 1-17;

printing an image on the coating using a liquid toner; and

5 fixing the image to the coated substrate,

wherein the adhesion of the liquid toner image to the substrate is improved over its adhesion to a similarly coated substrate in which the coating does not include the amine terminated material.

10 22. A printing method according to claim 21 wherein the substrate and the pigmented particles are both acidic.

23. A printing method according to claim 21 or claim 22 wherein the coating forms a substantially smooth surface.

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24. A printing method according to any of claims 21-23 wherein the substrate is a CD or DVD disk.